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ELKO-BIS
SYSTEMY ODGROMOWE

**LIGHTNING AIR TERMINALS
ON A CONCRETE FOUNDATION**



Lightning protection using concrete foundation air terminals

Requirements set by the Construction Law and ordinance of Infrastructure Minister, recommend to implement external lightning protection device (LPS) on building objects accordingly to Polish and European Standards. Protection of potentially explosive areas (so-called EX zones) may be particularly difficult. Basic information regarding lightning protection of this type of objects is described by standard PN-EN 62305-3 annex D.

If performed risk analysis accordingly to PN-EN 62305-2 standard, requires to carry LPS, lightning protection device should be used at least in the LPS class II. Additionally, all parts of the external lightning protection system should be at least 1 m away from the designated explosive zone. When this is not possible, installations should be carried out in a continuous manner and possible connections done through welding.

It should also be remembered that objects with explosive zones usually are buildings of high economic importance (for example, pumping stations, explosive material depots etc.), high objects with complicated construction.

Designing a lightning protection system for this type of objects is a highly complex process. Considering all the above information, it turns out that use of typical lightning protection components is often impossible. To face these problems Elko-Bis company is introducing high air terminals offer with a maximum height of 21 m. To protect objects containing explosive zones, allows to meet all the assumptions of Annex D to PN-EN 62305-3 standard. Air Terminals selected in the design process, using the rolling sphere method, allows to protect objects against atmospheric discharge, keeping appropriate separation distance of lightning protection system from the designated ATEX zones, and relevant requirements of cross-sections and used elements thicknesses.

**MORE INFORMATION AVAILABLE
AT OUR WEBSITE**

www.elkobis.com



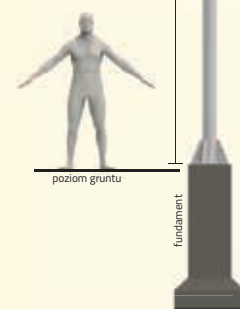
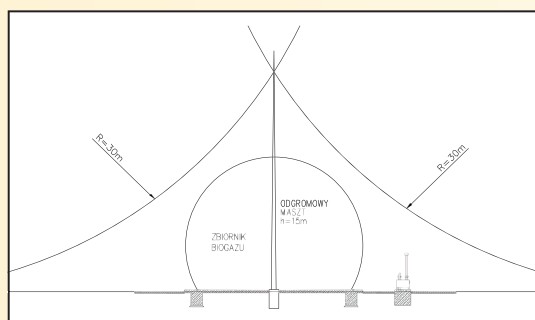
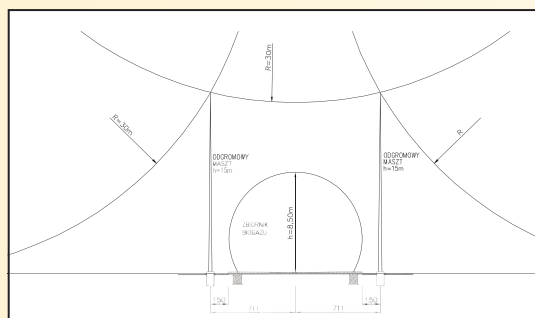
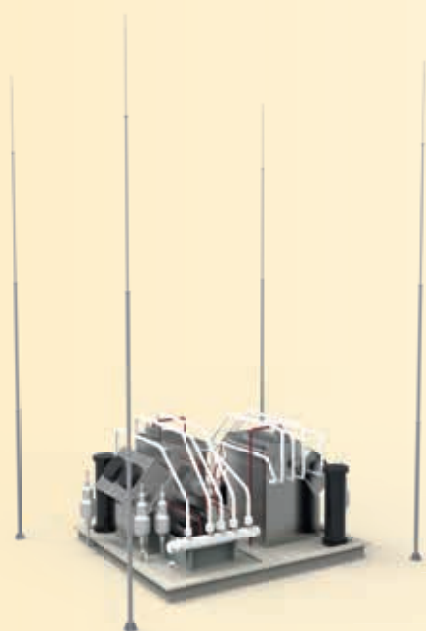
LIGHTNING AIR TERMINAL ON A CONCRETE FOUNDATION

Using lightning protection air terminal on the foundation is associated with a number of benefits:

- ⚡ Cost optimization of lightning protection
- ⚡ Obtaining appropriate separation distance from the protected objects
- ⚡ Protection of several devices simultaneously with one mast
- ⚡ Safe discharge of lightning current
- ⚡ Effective protection of buildings in ATEX zones

Height up to
21 m!

SAMPLE APPLICATION OF CONCRETE FOUNDATED AIR TERMINAL



To get more info acces:

www.elkobis.com




Air Terminal 18 , 21 m





Made of Hot Deep Galvanised Steel.


Lightning protection air terminal is used to protect certain devices and objects. Allows creation of extensive protection zones at facilities requiring high class protection (for example: objects with a high risk of explosion or important for region). Air terminal can provide a large separation distance and protection for a group of high objects.

Concrete foundation is ordered separately.

 Segment construction - **segment lengths of 6 or 3 meters.**

 Calculated endurance strength **30 years**

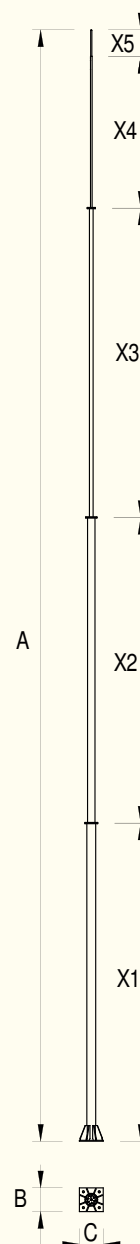
 Corrosivity category **C3**
(urban and industrial atmospheres, average SO₂ pollution, coastal areas with medium salinity).

 Leadtimes even up to **3 weeks**
(each particular leadtime to be earlier agreed with Sales Manager)

Manuals available at:
www.elkobis.com

CATALOG NUMBER	TYPE	A	B	C	X1	X2	X3	X4	X5	Foundation
16218002	-	18000	500	500	3000	6000	6000	3000	500	16290199
16221002	-	21000	500	500	6000	6000	6000	3000	500	16290199

OG 02

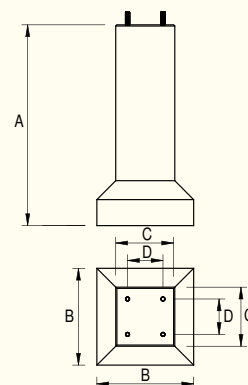


Air Terminal Concrete Foundation 1150



Concrete Foundation applied with 18m (cat.num. 16218002) and 21m (cat.num. 16221002) air terminals.
Weight: 1150 kg





CATALOG NUMBER	TYPE	VERSION	A	B	C	D	BOLT
16290199	-	1150	1700	820	500	300	M24



Air Terminals 6, 9, 12, 15 m



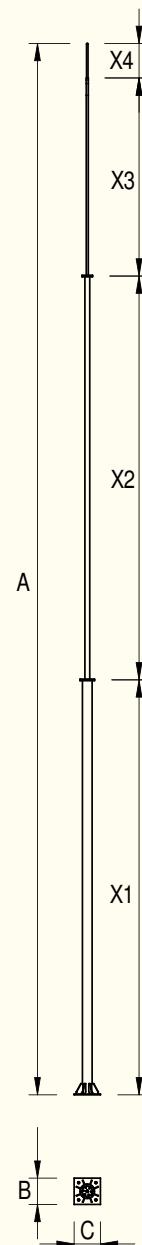
Made of Hot Deep Galvanised Steel.
Lightning protection air terminal is used to protect certain devices and objects. Allows creation of extensive protection zones at facilities requiring high class protection (for example: objects with a high risk of explosion or important for region). Air terminal can provide a large separation distance and protection for a group of high objects.
Concrete foundation is ordered separately.

-  Segment construction - **segment lengths of 6 or 3 meters.**
-  Calculated endurance strenght **30 years**
-  Corrosivity category **C3**
(urban and industrial atmospheres, average SO₂ pollution, coastal areas with medium salinity).
-  Leadtimes even up to **3 weeks**
(each particular leadtime to be earlier agreed with Sales Manager)

Manuals available at:
www.elkobis.com

CATALOG NUMBER	TYPE	A	B	C	X1	X2	X3	X4	BOLT
16206002	-	6000	400	400	-	3000	3000	500	16290299
16209002	-	9000	400	400	-	6000	3000	500	16290299
16212002	-	12000	400	400	3000	6000	3000	500	16290299
16215002	-	15000	400	400	6000	6000	3000	500	16290299

OG 02

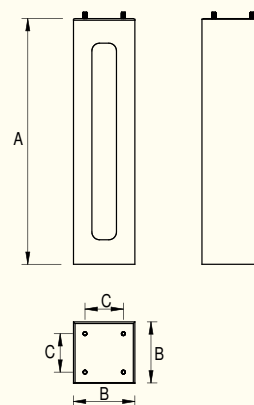


Air Terminal Concrete Foundation 400



Concrete Foundation applied with 6m (cat.num. 16206002), 9m (cat.num. 16209002), 12m (cat.num. 16212002) and 15m (cat.num. 16215002) air terminals.
Weight: 400 kg

CATALOG NUMBER	TYPE	VERSION	A	B	C	BOLT
16290299	-	400	1600	400	250	M24







**YOU HAVE NOT FOUND WHAT YOU ARE LOOKING
FOR IN OUR CATALOG?**


Contact Us !

Commercial Offers and Technical advise:

 export@elkobis.com.pl

 +48 71 335 69 45

 +48 71 330 69 25

 +48 71 330 66 15

www.elkobis.com



ELKO-BIS SYSTEMY ODGROMOWE SP. z o.o.

Company address

ul. Swojczycka 38e

51-501 Wrocław

Polska

TAX ID 8952011110

www.elkobis.com

✉ elkobis@elkobis.com.pl

Export Department

☎ +48 71 330 69 25

☎ +48 71 330 66 15

✉ handlowy@elkobis.com.pl

Technical advise

General

☎ +48 71 330 66 13

Projects

☎ +48 697 731 856

Assembly issues

☎ +48 607 636 661

✉ export@elkobis.com.pl

Export Department

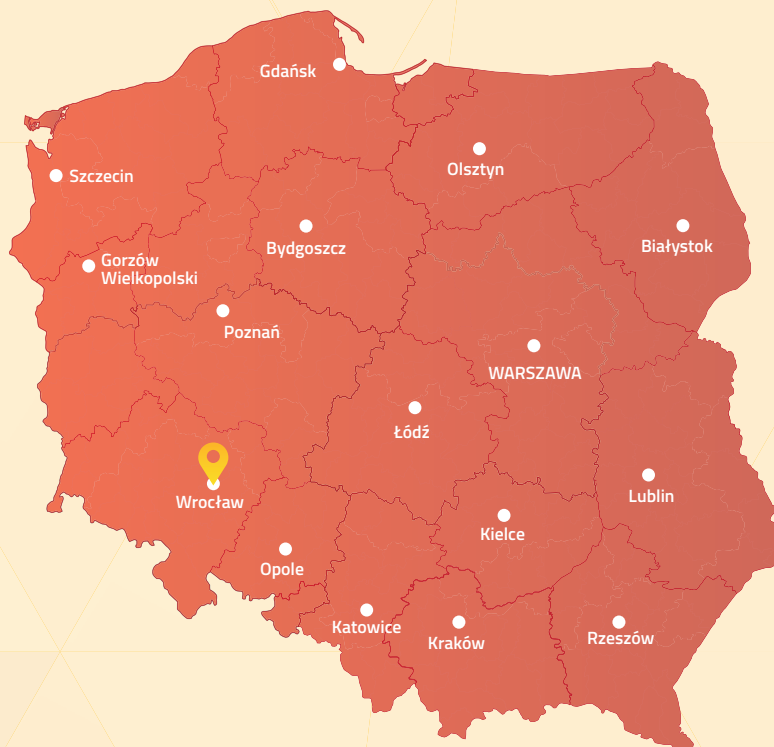


+48 71 330 66 15

Export Department



+48 71 330 69 25



Export Manager



+48 693 133 563

Export Manager



+48 607 267 237

Export & Business
Development Manager



+48 607 728 500

DISTRIBUTOR